ABSTRACT OF THE DISCLOSURE

A process for the production of very high quality base oils optionally with simultaneous production of high quality middle distillates comprises the stages for hydrotreatment, preferably hydrocracking, on Y or beta zeolite, and atmospheric distillation. The effluent is subjected to a catalytic dewaxing on the ZSM-48 catalyst. The process then comprises a hydrofinishing stage for hydrogenating the aromatic compounds, preferably on a catalyst that comprises at least one noble metal of group VIII, chlorine and fluorine, and the stages of atmospheric and vacuum distillation. The hydrofinishing stage is conducted at a temperature lower by 20-200°C than the catalytic dewaxing stage.